

ABSTRACT

A method of brazing an aluminum or aluminum alloy material, containing brazing an aluminum alloy brazing sheet that has an aluminum or aluminum alloy core material and, being clad on one or both surfaces, a filler alloy layer comprised of an Al-Si-based alloy and contains Mg incorporated at least in a constituent layer except the filler alloy layer, thereby to form a hollow structure whose one surface clad with the filler alloy is the inner surface, wherein the brazing is carried out in an inert gas atmosphere without applying any flux; and an aluminum alloy brazing sheet which satisfies the relationship: $(X+Y) \leq a/60+0.5$ and $X > Y$, wherein a (μm) represents the thickness of the filler alloy layer clad on the core material of the inner side of the hollow structure, and X and Y (mass%) represent the Mg contents of the core material and the brazing material, respectively.